

Effective on 12/08/2004.

Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

FEE TRANSMITTAL
For FY 2005☒ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 170.00

Complete if Known

Application Number	09/890,514
Filing Date	October 12, 2001
First Named Inventor	Darrell Meyer
Examiner Name	Winnie S. Yip
Art Unit	3637
Attorney Docket No.	100344.0007US1

METHOD OF PAYMENT (check all that apply)☐ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): _____☒ Deposit Account Deposit Account Number: 502191 Deposit Account Name: Rutan & Tucker

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FEE CALCULATION**1. BASIC FILING, SEARCH, AND EXAMINATION FEES**

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

2. EXCESS CLAIM FEES

Fee Description	Fee (\$)	Small Entity Fee (\$)
Each claim over 20 or, for Reissues, each claim over 20 and more than in the original patent	50	25
Each independent claim over 3 or, for Reissues, each independent claim more than in the original patent	200	100
Multiple dependent claims	360	180

Total Claims	Extra Claims	Fee (\$)	Fee Paid (\$)	Multiple Dependent Claims	Fee (\$)	Fee Paid (\$)
_____ - 20 or HP = _____ x _____ = _____						
HP = highest number of total claims paid for, if greater than 20						
Indep. Claims	Extra Claims	Fee (\$)	Fee Paid (\$)			
_____ - 3 or HP = _____ x _____ = _____						
HP = highest number of independent claims paid for, if greater than 3						

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee (\$)	Fee Paid (\$)
_____ - 100 = _____	_____ / 50 = _____	(round up to a whole number) x	125.00	= 0.00

4. OTHER FEE(S)

Non-English Specification, \$130 fee (no small entity discount)

Other: Appeal Brief

170.00

SUBMITTED BY

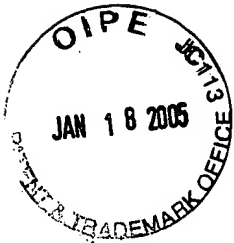
Signature		Registration No. (Attorney/Agent)	33880	Telephone	714-641-5100
Name (Print/Type)	Robert D. Fish	Date	January 12, 2005		

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Addendum

1. Weight Bearing Systems and Methods Relating to Same



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

EXAMINER: Winnie S. Yip
APPELLANT: Darrell Meyer
SERIAL NO. 09/890,514
FILED: October 12, 2001
FOR: Weight Bearing Systems and Methods Relating to Same
ART UNIT 3637

MS Appeal Brief – Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450
Attention: Board of Patent Appeals and Interferences

APPELLANT'S BRIEF UNDER 37 CFR § 1.192

This brief, transmitted in triplicate, is submitted along with the appellant's Notice of Appeal in this case. Please charge \$170.00 to cover the cost of filing the opening brief for a small entity as required by 37 CFR § 1.17(c) to our deposit account number 502191. Please also charge any additional fees or credit any overpayment to our deposit account.

This brief contains the following items under the headings in the order here indicated:

- I. Real Party In Interest
- II. Related Appeals And Interferences
- III. Status Of Claims
- IV. Status Of Amendments
- V. Summary Of Invention
- VI. Issues
- VII. Grouping Of Claims
- VIII. Argument
- IX. Appendix

I. Real Party In Interest

The real party in interest is the Applicant, Darrell Meyer.

II. Related Appeals And Interferences

There are no other appeals or interferences in this matter known to appellant.

III. Status Of Claims

There are 16 claims in this case. The claims on appeal are 29-42 and 57-58.

IV. Status Of Amendments

No amendment was filed after final. The claims were rejected in the final office action based on amendments entered in response to the previous non-final office action. Section IX recites the claims as entered and under final rejection.

V. Summary Of Invention

The invention is generally directed to a weight bearing element having a span greater than its height. The weight bearing element comprising a substantially open and flat web having a plurality of stabilizing members and at least two chords. Each of the chords defines a perimeter having a polygonal cross-sectional shape with at least 5 mutually non-coplanar sides, at least two of which are substantially parallel to the web. The web spans a distance between the two chords and at least one of the stabilizing members has a punched out opening or a flange protruding outward the plane of the flat web, the opening or flange extending across more than half but less than all of the distance between the two chords.

VI. Issues

1. Whether claims 29-37, 39-40, 42, and 57-58 should have been rejected under 35 U.S.C. § 103 as being obvious over Buecker (U.S. Pat. No. 6,131,362) in view of Bodnar (U.S. Pat. No. 5,207,045) (Final Office Action ¶13).

2. Whether claim 38 should have been rejected under 35 U.S.C. § 103 as being obvious over Buecker in view of Bodnar and further in view of Brooks (U.S. Pat. No. 991,603). (Final Office Action ¶4).

VII. Grouping Of Claims

Claims 29-58 stand or fall together.

VIII. Argument

Background

The appellant filed application serial no. 09/890514 for Weight Bearing Systems and Methods Relating to Same on October 12, 2001 claiming priority to PCT serial number PCT/US00/02837 filed February 03, 2000 and U.S. provisional application serial number 60/118952 filed February 05, 1999.

Five Office Actions have been issued for the application including two Final Office Actions. In the latest Office Action dated November 16, 2004, the Office objected to all claims as being obvious over Buecker (U.S. Patent No. 6,131,362) in view of Bodnar (U.S. Patent No. 5,207,045), and as to claim 38, in further view of Brooks (U.S. Patent No. 991,603).

Issue No. 1

Claims 29-37, were rejected under 35 U.S.C. § 103 as being obvious over Buecker in view of Bodnar.

The Examiner has not provided suggestion or motivation to combine reference teachings

In the response to the Office Action filed August 19, 2004, the applicant stated the position that the Examiner had not provided the motivation to combine references. In the Office Action dated November 16, 2004, the Examiner provided the alleged motivation as follows:

“Bodnar and Buecker both teach a weight bearing element having substantial limitation as claimed...”;

“...both teach the weight bearing element can be used to joint with other beams, either to be used as a stud...”; and

“...the beams of Bodnar and Buecker are capable used in same art and are capable to be combined as a joist to solve the same problem as claimed.”

The applicant fails to see the motivation in those statements. The first statement, “Bodnar and Buecker both teach a weight bearing element having substantial limitation as claimed...”, may be relevant to an issue of whether the references are analogous art, but it is irrelevant to the issue of suggestion or motivation to combine. “The test for an implicit showing [of motivation to combine] is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art.” *In re Kotzab* 217 F.3d 1365, 1370 (Fed. Cir. 2000). Merely stating that the references “both teach a weight bearing element” is not suggestion or motivation to combine because the Examiner has not articulated what the combined teachings, general knowledge, or nature of the problem would have suggested to one of ordinary skill in the art.

The second statement, “...both teach the weight bearing element can be used to joint with other beams, either to be used as a stud...” is incomprehensible, but no matter how it is interpreted, it does not provide suggestion to combine references.

The third statement, “...the beams of Bodnar and Buecker are capable used in same art and are capable to be combined as a joist to solve the same problem as claimed” also does not provide any suggestion to combine. As discussed above, stating that references are capable of being used in the same art may have relevance to an analogous art issue, but it has no relevance to a suggestion to combine issue. The examiner also states that the references are capable of being combined as a joist. The mere fact that the references can be combined or modified does not render the resultant combination obvious unless the prior art suggests the desirability of the combination. *In re Mills*, 916 F.2d 680. Moreover, the teachings of Bodnar do not address the nature of the problem being solved by the present claims. The present claims are directed to a weight bearing element (a joist) with a substantially open yet strong web between two chords.

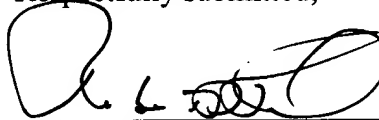
The joist is designed to support the weight of horizontal structures. Bodnar, on the other hand, is directed to solving the problem of the "thermal bridge effect" (column 7, lines 54-59) as it relates to stabilizing pre-cast concrete walls. In the present claims, the web supports receives all of the weight of the horizontal structure it is supporting. In Bodnar, the web merely contributes to reduction of the thermal bridge effect while providing stability to keep the wall upright. In attempting to solve the problem being presented by the present specification, one would not look to Bodnar were it not for hindsight.

Conclusion Of Argument

In rejecting the presently pending claims, the Office improperly combined references and failed to provide any reasonable suggestion for doing so. Therefore, the rejection of independent claim 29 and all of its dependent claims should be withdrawn.

Dated: January 12, 2005

Respectfully submitted,

A handwritten signature in black ink, appearing to read "R. D. Fish", written over a horizontal line.

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APPENDIX

29. **(Previously Presented)** A weight bearing element comprising:
- a substantially open and flat web having a plurality of spaced stabilizing members; and
- at least two chords wherein each cord defines a perimeter having a polygonal cross-sectional shape with at least 5 mutually non-coplanar sides, at least two of which are substantially parallel to the web, each of the two chords being connected to the web at at least one vertex of an angle of the chord,
- wherein the web spans a distance between the two chords, and at least one of the plurality of spaced stabilizing members comprises a punched out opening or a flange protruding outward the plane of the flat web, the opening or flange extending across more than half but less than all of the distance between the two chords; and
- wherein the weight bearing element has a span that is greater than its height.
30. **(Previously Presented)** The weight bearing element of claim 29 wherein the stabilizing members are formed from punched out openings, and the punched out opening comprise at least forty percent of the area of the web.
31. **(Previously Presented)** The weight bearing element of claim 29 wherein the stabilizing members are flanges.
32. **(Previously Presented)** The weight bearing element of claim 31 wherein sets of the flanges are coupled together to form trapezoidal stabilizing members projecting outward from the web.
33. **(Previously Presented)** The weight bearing element of claim 31 formed by roll forming a single sheet of material into the web and two chords.
34. **(Previously Presented)** The weight bearing element of claim 31 wherein the chord is fabricated from a single continuous sheet.

35. **(Previously Presented)** The weight bearing element of claim 29 formed by roll forming a single sheet of material into the web and two chords.
36. **(Previously Presented)** The weight bearing element of claim 29 wherein the chord is fabricated from a single continuous sheet.
37. **(Previously Presented)** The weight bearing element of claim 29 wherein the cross section of at least one of the two chords , excluding any portion in parallel with and connected to the web, has a shape of a regular or irregular pentagon.
38. **(Previously Presented)** The weight bearing element of claim 29 further comprising a fill material in the cavity of at least one of the two chords.
39. **(Previously Presented)** The weight bearing element of claim 31 wherein the two chords are substantially parallel chords coupled to opposite sides of the web.
40. **(Previously Presented)** The weight bearing element of claim 39 wherein the chord further comprises at least 5 planar sides, each side corresponding to one side of the closed multi-sided figure of the cross-sectional shape of the chord.
41. **(Previously Presented)** The weight bearing element of claim 40 wherein the number of sides is at least 6.
42. **(Previously Presented)** The weight bearing element of claim 31 wherein the chord has a height and a width, such that the height is greater than the width.
- 43-56. **(Withdrawn)**
57. **(Previously Presented)** The weight bearing element of claim 29 wherein the element is formed from a continuous piece of at least 20 gauge steel.
58. **(Previously Presented)** The weight bearing element of claim 29 wherein at least a portion of the flange extends in a direction normal to the span.